

Remarks

Favorable reconsideration of this application is requested in view of the following remarks. For the reasons set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The final Office Action dated September 19, 2005, cited informality objections to the pending claims and drawings; and claims 1-4, 6, 27-29 and 32 are rejected under 35 U.S.C. § 112, second paragraph.

Applicant appreciates the indication of allowability for claims 7-24, 26 and 31, and the Examiner's consideration in the teleconference of November 16, 2005. In accordance with the teleconference, claims 1, 2, 27, 28, 29, and 32 are amended to facilitate prosecution of this matter; as addressed below, Applicant maintains that the Section 112(2) rejections are improper. The wording issue is merely objectionable matter.

Accordingly, Applicant respectfully traverses the Section 112(2) rejections because the claim language particularly points out the subject matter of the instant invention. The Examiner asserts that it is unclear "how a plurality of probable cross talk signals will converge toward a single signal (superimposed cross talk) as the plurality of probable cross talk signals are generated as a result of refining a previous probable cross talk into a better probable cross talk." Applicant submits that the skilled artisan would recognize that "convergence" occurs when multiple items meet or approach a specified destination. For

example, the number series $S(n) = \sum_{i=1}^n 2^{-i}$ for $n \geq 1$ having $S(1) = 0.5$, $S(2) = 0.75$, $S(3) = 0.875$, $S(4) = 0.9375$ approaches a value of 1 and the property of converging toward 1 is a collective property of the numbers of the series. A variant of this example was discussed in the teleconference wherein the Examiner maintained that only a single number from the series can converge towards the destination. Applicant respectfully disagrees because it is not clear how the movement towards a destination of convergence can occur for a single parameter. In addition, similar language occurs in U.S. Patent 6,518,899, which has the limitations "said plurality of filtered output signals converge toward each other" in claims 1-4, and United States Patent 6,963,621, which has the limitations "each successive stage receiving the approximation from the preceding stage in an iterative fashion so that errors in successive approximations converge toward zero with increase in the number of stages" in claims 1 and 9. However, as Applicant and the

Examiner agreed in the teleconference that one skilled in the art would understand (using either form) the technical subject matter of this claim language, in the interest of expediting prosecution, the claims are amended to recite convergence of a single probable cross talk signal (implicitly referencing the previous iterations). In this regard, the amendment of these claims should not be taken to change the scope or to be needed for patentability reasons because the meaning is the same with or without this slight wording change.

With particular respect to claims 27 and 32, Applicant traverses the Section 112(2) rejection and notes that Applicant has previously amended claims 27 and 32 to include the cited limitations of “toward the superimposed cross talk” in an effort to facilitate prosecution. Thus, Applicant submits that the Section 112(2) rejection is moot and the rejection should be withdrawn.

Regarding the objections to claims 27, 29 and 32, Applicant respectfully traverses because the Examiner’s suggestions are not consistent with the claimed invention. For claim 29, Examiner has stated the “same comment applies to claim 2” apparently to also object to claim 2. Each of the objections address limitations directed to results of an iterative process. As discussed at page 13 of the Specification, one example process includes an initial estimate of a cross-talk signal that is refined through iterative calculations to obtain a cross-talk signal that more closely resembles the actual value. *See* page 13, lines 7-28. As discussed above, Applicant submits that the term “converging” must apply to a plurality of things, *e.g.*, signals, as one item cannot converge, as claimed. Thus, the singular use of the term “signal” or “estimate” in the respective objected-to claims refers to one iterative result while the plural use of the term refers to the iterative results as a whole. Applicant submits that the claim language is appropriate as viewed by a skilled artisan. However, in the interest of expediting prosecution and as discussed above, claims 2, 27, 29, and 32 are amended to recite a single estimate or probable cross talk signal as suggested by the Examiner.

Applicant respectfully traverses the drawing objection because the drawings show every feature specified in the claims. First, the Examiner identifies a “step/means for iteratively computing a probable cross talk signal.” Applicant submits that these limitations are already shown, for example, decoder 702 in Fig. 7. Next, the Examiner identifies a “step or means for calculating the data based on the iteratively computed probable cross talk

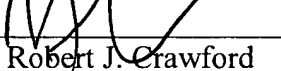
converging toward the superimposed cross talk.” One illustration of this may also be found, for example, at hard decision 704 of Fig. 7. Finally, the Examiner identifies a “means/step for computing a probable desired signal estimate.” An example of this may also be found in decoder 700 of Fig. 7. The iterative process is illustrated in Fig. 7 by the feedback from the output P2 of decoder 702 to an input of decoder 700 and the feedback from the output P1 of decoder 700 to an input of decoder 702. Applicant also notes the discussion at page 24, line 20 through page 25, line 8 indicating the various functions performed in Fig. 7. As each of the identified limitations has been shown to be present in the figures, Applicant submits that the objection to the drawings is improper and requests that the objection be removed.

In view of the above discussion, Applicant believes that the rejections have been overcome and the application is in condition for allowance. A favorable response is requested. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is encouraged to contact the undersigned at (651) 686-6633.

Respectfully submitted,

CRAWFORD MAUNU PLLC
1270 Northland Drive, Suite 390
St. Paul, MN 55120
651/686-6633

Dated: November 18, 2005

By: 
Robert J. Crawford
Reg. No. 32,122
James R. McGee
Reg. No. 54,306